| Work Orde                      |                          |  |  |                              |             |       |              |               |               |  | Page 1         |
|--------------------------------|--------------------------|--|--|------------------------------|-------------|-------|--------------|---------------|---------------|--|----------------|
| Revision ID:                   | D3258-1<br>Angle Bracket |  |  | Accept                       |             |       |              | S             | Setup Sta     | ! ! <b>!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!</b> |                |
|                                | 5/10/2011                | Start Qty: 6.00<br>Req'd Qty: 6.00             |  |                              | Cust Item : |       |              |               |               | 1 (##:II)#1 #                                |                |
| Approvals:                     | Process Pla              | n:   | Date: <u>//-05-//</u><br>Date:           | Tooling:<br>SPC (Y/N):       |             | ate:  |              | R             | Run Sta<br>St |  |                |
| Sequence ID/<br>Work Center ID |                          | Operation<br>Description                       | ,  | Set Up/<br>Run Hours         | Tool ID     | Tool# | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number                             | Insp.<br>Stamp |
| Draw Nbr<br>D3258              | Rev<br>Rev               | ision Nbr<br>A                                 |  |                              |             |       |              |               |               |  |                |
| Waterjet FLOW CNC Waterje      | t                        | FLOW WATER JET  Memo  I-Cut as pe  Deburr if n | -<br>or Dwg D3258 □ Dwg Rev:<br>ecessary | 0.00<br>0.00<br>A □Prog Rev: | ▶ □2-       |       |              | K311-6        |               | 60   | )              |
| QC Quality Control             |                          | QC2- Inspect parts off r                       | machine FAI/FAIB                         | 0.00                         |             |       |              | RII.          | -5-11         | _  |                |

120 QC

Quality Control

Memo

QC8- Inspect parts - second check

|         | •    |                                       |                      |                              |      |                |                  |        |                                     | •                        |
|---------|------|---------------------------------------|----------------------|------------------------------|------|----------------|------------------|--------|-------------------------------------|--------------------------|
| W/O:    |      |                                       | W                    | ORK ORDER CHANG              | GES  |                |                  |        |                                     | <b>.</b>                 |
| DATE    | STEP | PRO                                   | CEDURE CHA           | NGE                          |      | Ву             | Date             | Qty    | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|         |      |                                       |                      |                              |      |                |                  |        |                                     | ,                        |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
| Part No | •    | PAR #:                                | Fault Cate           | gory:                        | NC   | R: Yes         | <br>No <b>DQ</b> | A:     | Date:                               |                          |
|         | Re   | solution:                             | Dispositio           | n:                           | QA   | : N/C Cld      | osed:            |        | Date: _                             |                          |
| NCR:    |      |                                       | WORK ORD             | ER NON-CONFORM               | ANCE | (NCR           | )                |        |                                     | ,                        |
| DATE    | CTED | Description of NC                     |                      | Corrective Action Section B  |      |                | Verificati       |        | Approval                            | Approval                 |
| DATE    | STEP | Section A                             | Initial<br>Chief Eng | Action Description Chief Eng |      | Sign &<br>Date |                  | tion C | Chief Eng                           | QC Inspector             |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
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|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      | · · · · · · · · · · · · · · · · · · · |                      |                              | ***  |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |
|         |      |                                       |                      |                              |      |                |                  |        |                                     |                          |

#### Work Order ID 69422

Tuesday, May 10, 2011 3:33:50 PM



Page 2

Item ID:

D3258-1

OC:

Accept

Setup Start



**Revision ID:** 

Item Name:

Angle Bracket

**Start Date:** 5/10/2011 Required Date: 5/16/2011

Start Oty: 6.00

Req'd Qty: 6.00

Memo

Memo



**Cust Item ID:** 

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date:

Tooling: SPC (Y/N): Date:

Date:

Run

Start

Stop

Stop



Sequence ID/ Work Center ID

Operation

NC BRAKE

Set Up/ **Run Hours**  Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

130

Brake NC

Brake NC

Description

0.00

0.00

Deburr if necessary ☐ Form as per Dwg D3258

513 1165/12

140

Quality Control

QC5- Inspect part completeness to step on W/O

150

Packaging

Identify as per dwg & Stock Location: 044

0.00

Memo

0.00

Packaging

|             | 4444              | W   | ORK ORDER CHANG  | GES  |  |  |   |   |  |
|-------------|-------------------|---|--|--|--|--|---|---|--|
| STEP        | PRO               | CEDURE CHA  | NGE  | By   | ,  | Date   | Qty   | Approval Chief Eng / Prod Mgr   | Approval<br>QC Inspector   |
|             |                   |   |  |  |  |  |   |   |  |
|             |                   |   |  |  |  |  |   |   |  |
|             |                   |   |  |  | -  |  |   |   |  |
|             | <i>y</i>          |   |  |  |  |  |   |   |  |
|             |                   |   |  |  |  | <b></b>  |   |   |  |
| •           | PAR #:            | Fault Cate  | gory:  | NCR: Y   | es N   | lo <b>DQ</b>   | A:  | _ Date: _   |  |
| Resolution: |                   | Dispositio  | n:   | QA: N/   | C Clos   | sed:   |   | Date: _   |  |
|             | \                 | WORK ORD  | ER NON-CONFORM   | IANCE (N   | CR)  |  |   |   |  |
| STED        | Description of NC |   |  |  |  | Verification   |   | Approval  | Approval   |
| SIEP        | Section A         | Initial<br>Chief Eng                                  | Action Description  Chief Eng  |  |  | Sect   | ion C   | Chief Eng   | QC Inspector   |
|             |                   |   |  |  |  |  |   |   |  |
|             |                   |   |  |  |  |  |   |   |  |
|             |                   |   |  |  |  |  |   |   |  |
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|             |                   |   |  |  |  |  |   |   |  |
|             |                   |   |  |  |  |  |   |   |  |
|             |                   | :PAR #: Resolution:  STEP Description of NC Section A | STEP PAR #: Fault Cate  Resolution: Dispositio  WORK ORD  STEP Description of NC Section A Initial Chief Eng | PAR #: Fault Category:  Resolution: Disposition:  WORK ORDER NON-CONFORM  STEP Description of NC Section A Corrective Action Section A Chief Eng Chief Eng Chief Eng | : PAR #: Fault Category: NCR: Y  Resolution: Disposition: QA: N/C  WORK ORDER NON-CONFORMANCE (N  STEP Description of NC Section A Initial Chief Eng Chief | STEP PAR #: Fault Category: NCR: Yes N Resolution: Disposition: QA: N/C Clos  WORK ORDER NON-CONFORMANCE (NCR)  STEP Description of NC Section A    Corrective Action   Section B   Initial   Action Description   Chief Eng   Chi | STEP PAR #: Fault Category: NCR: Yes No DQ Resolution: Disposition: QA: N/C Closed:  WORK ORDER NON-CONFORMANCE (NCR)  STEP Description of NC | STEP PAR #: Fault Category: NCR: Yes No DQA:  Resolution: Disposition: QA: N/C Closed:  WORK ORDER NON-CONFORMANCE (NCR)  STEP Description of NC Section A Initial Action Description Chief Eng | STEP PROCEDURE CHANGE By Date Qty Approval Chief Eng Proc Migr Pro |

| Wo | rk | Oı | der | ID | 69422 |
|----|----|----|-----|----|-------|
|----|----|----|-----|----|-------|

Tuesday, May 10, 2011 3:33:50 PM



Page 3

Item ID:

D3258-1

Accept

Setup Start

Stop



Revision ID:

Item Name: **Start Date:** 

Angle Bracket

5/10/2011

Start Qty: 6.00

Req'd Qty: 6.00



Cust Item ID:

**Customer:** 

Reference:

Approvals:

Process Plan:

Operation

Description

Date:

Tooling:

Date:

Run

Start

Stop



Required Date: 5/16/2011

QC:

Date:

SPC (Y/N):

Set Up/

**Run Hours** 

Tool ID

Date:

Tool # Plan

Code

Accept Qty

Reject

Insp.

Work Center ID 160

Sequence ID/

Quality Control

Memo

QC21- Final Inspection - Work Order Release

0.00

0.00

Qty

Reject Number

Stamp

| W/O:    |             | WORK ORDER CHANGES |                      |                              |           |                |              |        |   |                       |  |
|---------|-------------|--------------------|----------------------|------------------------------|-----------|----------------|--------------|--------|---|-----------------------|--|
| DATE    | STEP        | PRO                | OCEDURE CH           | IANGE                        |           | Ву             | Date         | Qty    | Approval Chief Eng / Prod Mgr           | Approval QC inspector |  |
|         |             |                    |                      |                              |           |                |              |        | Floating:                               |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              | ***       |                |              |        |   |                       |  |
|         |             |                    |                      | A COLAMBIAN                  |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
| Part No | »:          | PAR #:             | Fault Ca             | tegory:                      | NCI       | R: Yes         | No <b>DQ</b> | A:     | Date: _                                 |                       |  |
|         | Resolution: |                    |                      | ion:                         | QA:       | N/C CId        | sed:         |        | Date: _                                 |                       |  |
| NCR:    |             | 1                  | WORK OR              | DER NON-CONFOR               | MANCE     | (NCR           | )            |        | *************************************** |                       |  |
| DATE    | STEP        | Description of NC  |                      |                              | Section B |                | Verifi       | cation | Approval                                | Approval              |  |
| DALE    | SIEP        | Section A          | Initial<br>Chief Eng | Action Description Chief Eng | on        | Sign &<br>Date | Sect         | ion C  | Chief Eng                               | QC Inspector          |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      | ***                          |           |                |              |        |   |                       |  |
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|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              |        |   |                       |  |
|         |             |                    |                      |                              |           |                |              | •      |   |                       |  |

#### **Picklist Print**

Tuesday, May 10, 2011 3:33:59 PM

Work Order ID: 69422

Parent Item:

D3258-1

Parent Item Name: Angle Bracket



Start Date: 5/10/2011

Required Date: 5/16/2011

Page 1

Start Qty: 6.00

Required Qty: 6.00

Comments:

1PP B□05.11.01□Added Steps 6-7□KJ/JLM□1PP Rev:C Now on Waterjet 06-12-13 JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin Primary<br>Item Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|------------------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304S16GA                       |                        | Purchased     | No                           |                  | 110             | sf                 | 202.9000       | 0.005       | 0.031579     |               | 15             |        |
| 304/316 Sheet .063              |                        |               | ·                            |                  |                 |                    |                |             | (生)          | 1-5-11        |                |        |

| <u>Location</u> | Loc Qty | Loc Code |                      |
|-----------------|---------|----------|----------------------|
| MAT020          | 202.9   |          |                      |
| 117275          | 42.9    |          | ארפרוו <u>ארפרוו</u> |
| 117653          | 160     |          |                      |

|         | -    |                   |                      |                              |                |              |                                     |                          |
|---------|------|-------------------|----------------------|------------------------------|----------------|--------------|-------------------------------------|--------------------------|
| W/O:    |      |                   | W                    | ORK ORDER CHANG              | ES             | _            |                                     | ,                        |
| DATE    | STEP | PRO               | OCEDURE CH           | ANGE                         | Ву             | Date Qty     | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|         |      |                   |                      |                              |                | ·            | ·                                   |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      | .,                           |                |              |                                     |                          |
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|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      | ·<br>                        |                |              |                                     |                          |
| Part No | :    | PAR #:            | Fault Cat            | tegory:                      | _ NCR: Yes 1   | lo DQA:      | Date: _                             |                          |
|         | R    | esolution:        | Disposit             | ion:                         | _ QA: N/C Clo  | sed:         | Date: _                             |                          |
| NCR:    |      | 1                 | WORK OR              | DER NON-CONFORMA             | ANCE (NCR)     |              |                                     |                          |
| DATE    | STEP | Description of NC |                      |                              | ion B          | Verification | Approval                            | Approval                 |
| DAIL    | SIEF | Section A         | Initial<br>Chief Eng | Action Description Chief Eng | Sign &<br>Date | Section C    | Chief Eng                           | QC Inspector             |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |
|         |      |                   |                      |                              |                |              |                                     |                          |

| DART AEROSPACE LTD           | Work Order:  | 1,9472      |
|------------------------------|--------------|-------------|
|                              |              |             |
| Description: Angle Bracket   | Part Number: | D3258-1     |
| Inspection Dwg: D3258 Rev: A |              | Page 1 of 1 |

#### FIRST ARTICLE INSPECTION CHECKLIST

| Х | First Article | Prototype |
|---|---------------|-----------|
|---|---------------|-----------|

| Drawing<br>Dimension | Tolerance     | Actual<br>Dimension | Accept       | Reject | Method of<br>Inspection | Comments |
|----------------------|---------------|---------------------|--------------|--------|-------------------------|----------|
| 0.500                | +/-0.010      | 508                 | 4            |        | U 1302                  |          |
| 1.050                | +/-0.010      | 1,657               | k            |        | ν                       |          |
| 0.250                | +/-0.010      | , 749               | <b>ا</b> ـــ |        | V                       |          |
| 0.202                | +/-0.010      | 206,                | *            |        | ٧                       |          |
| 1.454                | +/-0.010      | 1,467               | ъ            |        | V                       |          |
| Ø0.206               | +0.005/-0.001 | ,206,               | ¥            |        | V                       |          |
| R0.125               | +/-0.010      | 761.                | >            |        | R.G.                    |          |
|                      |               |                     |              |        |                         |          |
|                      |               |                     |              |        |                         |          |
|                      |               |                     |              |        |                         |          |
|                      |               |                     |              |        |                         |          |
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|                      |               |                     |              |        |                         |          |

|              |         |             | _        |      |                  |     |
|--------------|---------|-------------|----------|------|------------------|-----|
| Measured by: | B       | Audited by: | 9,       | Prot | totype Approval: | N/A |
| Date:        | 11-5-11 | Date:       | 11/05/11 |      | Date:            | N/A |

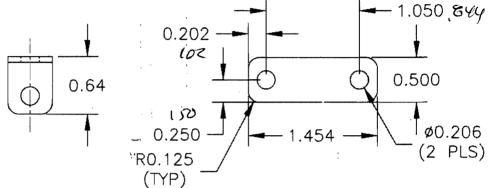
| Rev | Date     | Change    |   | Revised by | Approved |
|-----|----------|-----------|---|------------|----------|
| A   | 07.01.17 | New Issue | : | KJ/JLM     |          |

| W/O:    |      | WORK ORDER CHANGES             |  |                 |              |                |      |                 |                               |                          |  |
|---------|------|--------------------------------|--|-----------------|--------------|----------------|------|-----------------|-------------------------------|--------------------------|--|
| DATE    | STEP | PROCEDURE CHANGE               |  |                 |              | Ву             | Date | Qty             | Approval Chief Eng / Prod Mgr | Approval<br>QC Inspector |  |
|         |      |                                |  |                 |              |                |      |                 |                               |                          |  |
|         |      | ·                              |  |                 |              |                |      |                 |                               |                          |  |
| Part No |      | PAR #:                         |  | tegory:         |              |                |      |                 |                               |                          |  |
|         | R    | esolution:                     |  |                 |              |                |      |                 | Date: _                       | · .                      |  |
| NCR:    |      | . <b>V</b>                     | VORK OR  | DER NON-CONFORM | <b>JANCE</b> | (NCR)          |      |                 |                               |                          |  |
| DATE    | STEP | Description of NC<br>Section A | Initial Action Description Chief Eng Chief Eng |                 |              | Sign &<br>Date |      | cation<br>ion C | Approval<br>Chief Eng         | Approval<br>QC Inspector |  |
| -       |      |                                |  |                 |              |                |      |                 |                               |                          |  |
| _       |      |                                |  | · .             |              |                |      |                 |                               |                          |  |
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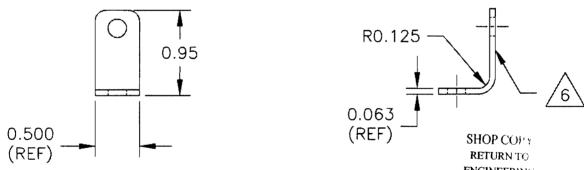


| DESIG | DRAWN BY     | DART AEROSP<br>HAWKESBURY, ONTAR | · · · · · · · · · · · · · · · · · · · |
|-------|--------------|----------------------------------|---------------------------------------|
| CHEC  | KED APPROYED | DRAWING NO.                      | REV. A                                |
|       | # 9          | D3258                            | SHEET 1 OF 1                          |
| DATE  |              | TITLE                            | SCALE                                 |
| 04.0  | )1.27        | ANGLE BRACKET                    | 1:1                                   |
| Α     | 04.01.27     | NEW ISSUE                        |                                       |





#### D3258-1 FLAT PATTERN



## D3258-1 ANGLE BRACKET

ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

WORK ORDER NO. <u>UGU</u> 27

#### NOTES:

- 1) BREAK ALL SHARP EDGES 0.005 to 0.015
- 2) MATERIAL: AISI 304/316 SS 0.063 (16 GAUGE) THICK (REF. DART SPEC. M304S16GA)
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE INCHES
- 6) ENGRAVE DART P/N AS SHOWN

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|             | -    |                                |                             |                              |      |                |              |            |                               |                          |  |
|-------------|------|--------------------------------|-----------------------------|------------------------------|------|----------------|--------------|------------|-------------------------------|--------------------------|--|
| W/O:        |      |                                | WC                          | ORK ORDER CHANG              | ES   |                |              |            |                               |                          |  |
| DATE        | STEP | PROCEDURE CHANGE               |                             |                              |      | Ву             | Date         | Qty        | Approval Chief Eng / Prod Mgr | Approval<br>QC Inspector |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            | '                             |                          |  |
|             |      |                                |                             | <u> </u>                     |      |                |              |            |                               |                          |  |
|             |      | ÷                              |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      | <u> </u>                       |                             |                              |      |                |              |            |                               |                          |  |
| Part No:    |      | PAR #:                         | Fault Category: NCR: Yes No |                              |      |                | lo <b>DQ</b> | DQA: Date: |                               |                          |  |
| Resolution: |      |                                | Disposition: Q              |                              |      |                |              | Date:      |                               |                          |  |
| NCR:        |      | ·                              | WORK ORD                    | ER NON-CONFORM               | ANCE | (NCR)          |              |            |                               |                          |  |
| DATE        | STEP | Description of NC<br>Section A | Corrective Action Section B |                              |      | Verific        |              | ation      | Approval                      | Approval                 |  |
| DATE        |      |                                | Initial<br>Chief Eng        | Action Description Chief Eng |      | Sign &<br>Date | Section C    |            | Chief Eng                     | QC Inspector             |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
| ٠.          | ŀ    |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             | . <u> </u>                   |      |                | -            |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |
|             |      |                                |                             |                              | i    |                |              |            |                               |                          |  |
|             |      |                                |                             |                              |      |                |              |            |                               |                          |  |